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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,546	07/01/2003	William T. Cummins	1395007US1AP	3599

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SAND & SEBOLT
AEGIS TOWER, SUITE 1100
4940 MUNSON STREET, NW
CANTON, OH 44718-3615

EXAMINER

JULES, FRANTZ F

ART UNIT	PAPER NUMBER
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3617

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,546

Applicant(s)

CUMMINS, WILLIAM T.

Examiner

Frantz F. Jules

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 20-23 is/are allowed.
- 6) ☒ Claim(s) 1-9, 12-13 and 15-18 is/are rejected.
- 7) ☒ Claim(s) 10, 11, 14 and 19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.

- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the recitation of a generally frustoconical wheel having a tapered outer surface including a generally frustoconical rim having an outer surface with a tapered inner surface complementary with the outer surface of the wheel in claims 1, 5, 20 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 12, line 1, the phrase "a side wall" is confusing as it is unclear how it relates to previously recited a side wall above in claim 1.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-7, 12-13, 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Atwood (US 1,653,331).

Claims 1-7, 12-13, 15-18

Atwood discloses a wheel assembly comprising a generally frustoconical wheel (1) having a side wall and a circumferential lateral wall with a tapered outer surface (13), a generally frustoconical rim (2) having a side wall and a circumferential annular wall with an outer surface and tapered inner surface complementary with the outer surface of the wheel as shown in figs. 1-3; and a tire (3) attached to the outer surface of the rim. The assembly further comprising fasteners for attaching the rim to the wheel.

The side wall of the wheel defines a plurality of threaded holes and the side wall of the rim defines a plurality of threaded holes and the side wall of the rim defines a plurality of holes alignable with the plurality of holes in the side wall of the wheel; and wherein the fasteners extend through the plurality of holes in the rim and the plurality of holes in the wheel to attach the rim to the wheel. The fasteners being threaded bolts in accordance with claims 3-4.

Said tire being solid and is made of an elastomer. The wheel has a side wall defining at least one annular recess area (15) adapted to be partially covered by the side wall of the rim when installed on the wheel in the manner defined in the instant claim 12.

Atwood also discloses a method of installing a rim and a tire on a wheel assembly comprising the step of providing a wheel having a lateral wall (13) with a tapered outer

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surface and a rim (2) with an annular wall having an outer surface and a tapered inner surface as shown in the drawings which is complementary with the outer surface of the wheel; and a tire (3) attached to the outer surface of the annular wall; sliding the complementary surfaces of the rim and the wheel until they frictionally engage; and fastening the rim to the wheel in accordance with claim 15.

The rim being installed on the wheel by applying pressure to the rim, and the holes on the rim with those found on the side wall of the wheel to receive a threaded bolt fastener to secure the rim to the wheel

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atwood in view of Kelly (US 5,135,288).

Claims 8-9

Atwood teaches all the limitations of claims 8-9 except for a wheel assembly wherein the rim is manufactured of stamped metal or cast metal. The general concept of providing a rim in a wheel assembly which is manufactured of stamped or cast metal falls within the realm of common knowledge as illustrated by Kelly which disclose the teaching of a metallic rim (7) in a wheel assembly. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Atwood to incorporate the

use of a rim which is manufactured of stamped or cast metal as taught by Kelly in order to provide additional reinforcement to the wheel assembly thereby improving on the vibration characteristics of the wheel.

Allowable Subject Matter

8. Claims 10-11, 14, 19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. None of the references of record suggests a wheel assembly wherein a flange is provided between the side wall and the annular wall of the rim, said flange extends outwardly away from the wheel in the manner defined in the instant claim 10. Also, none of the references of record suggests a wheel assembly wherein a recess area in a side wall of the wheel is adapted to receive a pry bar in the manner defined in the instant claim 14.

9. Claims 20-23 stand allowable. None of the references of record suggests a wheel assembly wherein a recess area in a side wall of the wheel is adapted to receive a pry bar in the manner defined in the instant claim 14.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Smith et al, Hoppenheit et al, and Burdette are cited to show related wheel assembly having rim with a tapered inner surface cooperating with tapered outer surface of a wheel.

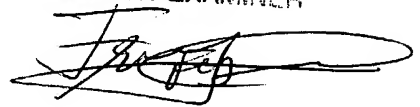
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11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frantz F. Jules whose telephone number is (703) 308-8780. The examiner can normally be reached on Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph S. Morano can be reached on (703) 308-0230. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

Frantz F. Jules
Examiner
Art Unit 3617

FRANTZ F. JULES
PATENT EXAMINER


FFJ

January 13, 2004